

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

Draft

**AIR QUALITY PERMIT
Issued under 401 KAR 52:030**

Permittee Name: Progress Rail Services Corporation
Mailing Address: 1600 Progress Drive, P.O. Box 1037, Albertville,
AL 35950

Source Name: Progress Rail Services Corporation
Mailing Address: 8587 Railroad Drive
Covington, KY 41015

Source Location: Railroad Drive off Locust Pike

Permit ID: F-07-027
Agency Interest #: 2490
Activity ID: APE20040001
Review Type: Conditional Major / Synthetic Minor, Operating
Source ID: 21-117-00154

Regional Office: Florence Regional Office
8020 Veterans Memorial Drive, Suite 110
Florence, KY 41042
(859) 525-4923

County: Kenton

Application
Complete Date: September 22, 2003
Issuance Date:
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Expiration Date:

**John S. Lyons, Director
Division for Air Quality**

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	Permit type	Log or Activity#	Complete Date	Issuance Date	Summary of Action
V-98-038	Initial Issuance	E860	2/13/1997	January 25, 1999	Initial Title V Permit
F-07-027	Initial Issuance	APE2004 0001	9/22/2003	---	Transition to Conditional Major/Synthetic Minor Permit

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**01 (01) Grit Blast Booth****Description:**

Steel grit abrasive material

11,760 lb grit used/railcar, 1 railcar blasted/hr

Date Installed: December 1991

Controls:

Enclosed blast room, 100% capture

Pulse-jet Collector using paper cartridges

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations which commenced on or after July 2, 1975.

1. Operating Limitations: None**2. Emission Limitations:**

- a. Emissions of particulate matter shall not exceed 10.77 lb/hr, as calculated by the equation in Appendix A of 401 KAR 59:010. [401 KAR 59:010, Section 3(2)]

Compliance demonstration method:

Compliance will be determined by daily monitoring of filter unit pressure drop, daily monitoring of visible emissions, record keeping and reporting. If the differential pressure is less than that specified in 7. **Specific Control Equipment Operating Limitations**, corrective action shall be taken in order to return the filter unit and/or monitoring system to proper working order. For lower pressure drop readings resulting from filter replacement, the permittee shall record the deviations as such in their daily records. Due allowance will be made for lower pressure drop readings provided the permittee establishes to the satisfaction of the Division that these lower readings only resulted from the replacement of the filters.

- b. There shall be no visible emissions greater than or equal to 20% opacity. [401 KAR 59:010 Section 3(1)(a), Standards for Particulate Matter]

Compliance demonstration method:

- i. Visible emissions from the filter unit exhaust shall be monitored daily using the visible/no visible emission observation techniques of EPA Reference Method 22;
- ii. If visible emissions from the filter unit exhaust are seen (not including condensed water in the plume), then an inspection shall be initiated of control equipment and corrective action taken. If visible emissions are present after the corrective action, the opacity shall be determined by Reference Method 9;
- iii. Maintain records and follow reporting procedures specified below.

3. Testing Requirements:

- a. If the Division requires it, the owner or operator shall perform a Reference Method 5 test, or other methods approved by the Division, to determine the emission rate of particulate matter. [401 KAR 59:010, Section 4(1), Test Methods and Procedures]
- b. If the Division requires it, the owner or operator shall perform a Kentucky Method 150 (F-1) test to determine the opacity of intermittent emissions or a Method 9 test to determine the opacity of continuous emissions. [401 KAR 59:010, Section 4 (5) and (6), Test Methods and Procedures]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**01 (01) Grit Blast Booth (continued)****4. Specific Monitoring Requirements:**

- a. The permittee shall monitor the filter unit pressure drop daily as specified in **2. Emission Limitations**.
- b. The permittee shall monitor visible emissions daily as specified in **2. Emission Limitations**.
- c. The owner or operator shall calibrate, maintain, and operate according to manufacturer's specifications a monitoring device to continuously measure the pressure drop across the baghouse.
- d. The owner or operator shall record once daily during operation of the grit blast booth the pressure drop across the baghouse.
- e. The owner or operator shall perform a maintenance inspection of the baghouse:
 - i. Monthly;
 - ii. After any daily manual pressure drop recording that is below the minimum pressure drop specified in **Specific Control Equipment Operating Conditions** below;
 - i. After any qualitative visible emissions test which shows visible emissions.

5. Specific Recordkeeping Requirements:

The owner or operator shall maintain records of the following information:

- a. Design and/or manufacturer's specifications for the baghouse including manufacturer/vendor recommended operating pressure drop across the baghouse.
- b. The operational procedures and preventive maintenance records for the baghouse.
- c. A log of the daily recorded pressure drops across the baghouse.
- d. A log of the results of the daily qualitative visible emissions inspections.
- e. The occurrence and duration of all times that the booth is in operation while the baghouse is not operating properly as defined in **Specific Control Equipment Operating Conditions** below.
- f. The results of any maintenance inspections.
- g. A log of any corrective actions taken.
- h. The daily and monthly number of railcars blasted in the grit blast booth.
- i. The pressure drop across the baghouse before and after each change out of bags.
- j. Daily and monthly shift hours of operation for the blast booth.

6. Specific Reporting Requirements: None**7. Specific Control Equipment Operating Conditions:**

- a. The owner or operator shall operate and maintain the baghouse in accordance with manufacturer's specifications and/or standard operating procedures at all times the grit blast booth is in operation.
- b. The owner or operator shall use bags in the baghouse made by the manufacturer of the baghouse or equivalent with a guaranteed efficiency of 97 percent or greater.
- c. The baghouse is operating properly and ensures continuous compliance with the particulate emissions and opacity standards when:
 - i. The pressure drop across the baghouse is above the minimum pressure drop recorded following the most recent complete changeout of bags, and
 - ii. No visible emissions are observed at the baghouse exhaust.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

02-01,02,03 (02) Existing Shop: Spray Paint Booth operation

Description: Manually-operated airless spray guns
40 gal/car, 20 gal/hr maximum capacity
50% transfer efficiency for solids

Date Installed: December 1991

Controls: 2 banks of overspray collectors using glass fiber cartridge filters

02-04 (02) Bucket Parts Washer

Description: Located in stencil room or paint kitchen in existing shop

Clean-up Solvent - Organic solvent

Date Installed: March 1997

04 Stencil Room

Description: Minor stenciling using rolling brushing or aerosol application.

Date Installed: April 1992

05 New Shop

Description: Aerosol painting

Date Installed: 1995

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations which commenced on or after July 2, 1975.

401 KAR 59:225, New miscellaneous parts and products surface coating operation which commenced on or after February 4, 1981 and is located in a county designated in 401 KAR 51:010 as nonattainment for ozone for any classification except marginal.

1. Operating Limitations:

- a. The volatile organic compounds (VOC) content of any coating, as applied, (excluding water or exempt solvent or both) used in the process shall not equal or exceed 3.5 lbs/gal in order to preclude applicability of the control requirements of 401 KAR 59:225 Section 3. Clean-up solvent is not considered a coating. [401 KAR 59:225 Section 6(1)(b)]

Compliance demonstration method:

Compliance will be determined through recordkeeping and reporting. If the coating is thinned, the VOC content of the coating as applied shall be determined by the following equation:

$$ef = \frac{(wt\ of\ VOC1\ per\ gal + wt\ of\ VOC2\ per\ gal + \dots)}{1\ gal - \left(\frac{wt\ of\ water\ per\ gal}{density\ of\ water} \right) - \left(\frac{wt\ of\ nonVOC1\ per\ gal}{density\ of\ non - VOC1\ per\ gal} \right) - \dots}$$

Where wt of VOC1 per gallon is the pounds per gallon of VOC in the paint multiplied by the volume ratio of parts of paint to paint and thinner mixed and wt of VOC2 is the pounds per gallon of VOC in the thinner multiplied by the volume ratio of parts of thinner to paint and thinner mixed. Likewise the terms in the denominator must be multiplied by the appropriate mix ratio.

If thinners are not used, the VOC content of the coating as applied can be determined directly from the vendor supplied Material Safety Data Sheet or Technical Data Sheet.

- b. The Bucket Parts Washer shall remain in a closed container when not in use.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**02, 04 and 05 Existing Shop, Stencil Room and New Shop (continued)****2. Emission Limitations:**

- a. Emissions of particulate matter shall not exceed 2.34 lbs/hr. [401 KAR 59:010, Section 3(2)]

Existing Shop Compliance demonstration method:

Compliance will be determined by daily monitoring of the paint spray booth air flowrate, daily monitoring of visible emissions and recordkeeping.

Stencil Room and New Shop Compliance demonstration method:

Compliance with the mass standard is assumed given the small amount of coating used at these operations.

- b. There shall be no visible emissions greater than or equal to 20% opacity. [401 KAR 59:010 Section 3(1)(a), Standards for Particulate Matter]

Existing Shop Compliance demonstration method:

For compliance with the opacity standard, the permittee shall perform a qualitative visual observation of the opacity of emissions at each stack no less than daily and maintain a log of the observations. If visible emissions from the stacks are seen (not including condensed water in the plume), then an inspection of control equipment shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the process shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the process during operation. In lieu of shutting the process down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the process may continue to operate.

Stencil Room and New Shop Compliance demonstration method:

Compliance with the opacity standard is assumed given the small amount of coating used at these operations.

- c. Refer to Condition 1 of SECTION D for source-wide VOC emission limit.
- d. Refer to Condition 4 of SECTION D for source-wide individual and combined HAP emission limits.

3. Testing Requirements:

- a. If the Division requires it, the owner or operator shall perform Reference Method 5 tests, or other methods approved by the Division, to determine the emission rate of particulate matter. [401 KAR 59:010, Section 4(1), Test Methods and Procedures]
- b. If the Division requires it, the owner or operator shall perform Kentucky Method 150 (F-1) tests to determine the opacity of intermittent emissions or Method 9 tests to determine the opacity of continuous emissions. [401 KAR 59:010, Section 4 (5) and (6), Test Methods and Procedures]
- c. If the Division requires it, the owner or operator shall use Reference Method 24, or other methods approved by the Division, to verify that the coatings used at an affected facility meet the exemption requirements in 401 KAR 59:225 Section 6. [401 KAR 59:225, Section 4(4), Compliance]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**02, 04 and 05 Existing Shop, Stencil Room and New Shop (continued)****4. Specific Monitoring Requirements (Existing Shop Only):**

- a. The owner or operator shall calibrate, maintain, and operate according to manufacturer's specification a monitoring device to measure the air flowrate in the spray paint booth.
- b. The owner or operator shall record once daily, during operation of the booth, the air flowrate in the spray paint booth.
- c. The permittee shall monitor the opacity of emissions from each spray booth stack as specified above in **2. Emission Limitations**.
- d. The owner or operator shall perform a maintenance inspection of the filter banks:
 - i. monthly
 - ii. after any daily flowrate check that is equal to or below the minimum flowrate specified in **Specific Control Equipment Operating Conditions** below
 - iii. after any qualitative visible emissions test which shows visible emissions.
- e. Solvent usage associated with the Bucket Parts Washer shall be monitored daily.

5. Specific Recordkeeping Requirements:

- a. The owner or operator shall maintain records of the following information:
 - i. Design and/or manufacturer's specifications for the filter banks.
 - ii. The operational procedures and preventive maintenance records for the filter banks.
 - iii. A log of the daily recorded flowrates in the spray paint booth.
 - iv. A log of the daily qualitative visible emissions inspections.
 - v. The occurrence and duration of all times that the booth is in operation while the filter banks are not operating properly as defined in **Specific Control Equipment Operating Conditions** below.
 - vi. The results of any maintenance inspections.
 - vii. A log of any corrective actions taken.
 - viii. The solids content as applied in each coating
 - ix. The daily and monthly shift hours of operation of the spray paint booth.
- b. Daily records shall be maintained by the owner or operator for the most recent two (2) year period. These records shall be made available to the Division or the U.S. EPA upon request. The daily records shall include, but not be limited to, the following: [401 KAR 59:225, Section 4(8), Compliance; Condition 2 under SECTION F]
 - i. Applicable administrative regulation number
 - ii. Application method and substrate type
 - iii. Amount and type of adhesive, coating, or solvent used at each point of application, including exempt compounds
 - iv. The VOC content of coatings as applied; if a thinner is used, these records must include the data required to perform the calculations specified in **1. Operating Limitations**.
 - v. The date for each application for adhesive, coating, or solvent; and
 - vi. The amount of surface preparation, cleanup, or washup solvent (including exempt compounds) used and the VOC content of each.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

02, 04 and 05 Existing Shop, Stencil Room and New Shop (continued)

6. Specific Reporting Requirements:

It is specified here that the reporting required by **Section F(5)** of this permit shall only be required to include the following:

1. Monthly records of the VOC content of coatings as applied during the compliance period.
2. Records of the monthly and twelve-month rolling total emissions of individual and combined HAP during the compliance period.
3. Records of the monthly and twelve-month rolling total emissions of VOC during the compliance period.
4. Records of filter replacements during the compliance period.

7. Specific Control Equipment Operating Conditions (Existing Shop Only):

- a. The owner or operator shall operate and maintain the filter bank in accordance with manufacturer's specifications and/or standard operating procedures at all times the spray paint booth is in operation.
- b. The owner or operator shall use filters in the filter banks made by the manufacturer of the filter bank units or equivalent and have a manufacturer's guaranteed efficiency of greater than 96%.
- c. The filter banks are operating properly when:
 - i. The flowrate in the paint spray booth is above 100 fpm, and
 - ii. No visible emissions are observed at the filter bank exhausts.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

03 (--)

Cold Cleaner Degreaser – New Shop

Description: Cold cleaner degreaser located in air brake room. Solvent capacity is 15 gallons.

APPLICABLE REGULATIONS:

401 KAR 59:185, New solvent metal cleaning equipment, located in a county designated in 401 KAR 51:010 as nonattainment for ozone for any classification except marginal.

1. Operating Limitations:

- a. The cold cleaner shall have a remote solvent reservoir.
- b. The cold cleaner shall not use a solvent with a vapor pressure that exceeds one (1.0) mm Hg (0.019 psi) measured at 20° C (68°F).
- c. The sink-like work area shall have an open drain area less than 100 sq. cm.
- d. Waste solvent shall be stored and/or properly disposed of with minimal loss due to evaporation.

Compliance Demonstration Method:

Refer to Recordkeeping Requirements.

2. Emission Limitations:

Refer to Condition 1 of SECTION D for source-wide VOC emission limit.

3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

4. Specific Monitoring Requirements:

The gallons of solvent added to the degreaser shall be monitored monthly.

5. Specific Recordkeeping Requirements:

- a. The following records shall be maintained for a minimum of five (5) years that include the following information for each solvent purchase:
 - i. The name and address of the solvent supplier;
 - ii. The date of the purchase;
 - iii. The type of solvent; and
 - iv. The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).
- b. Records of the gallons of solvent used monthly shall be maintained

6. Specific Reporting Requirements:

It is specified here that the reporting required by **Section F(5)** of this permit shall only be required to include the following: Records of the monthly and twelve-month rolling total emissions of VOC during the compliance period.

7. Specific Control Equipment Operating Conditions:

The degreaser cover shall be closed if not handling parts in the cleaner.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Stencil Room Dry Room Indirect Heaters	N/A
2. New Shop	
a. Caulking	401 KAR 59:010
b. Electric Arc Welding	401 KAR 59:010
c. Oxygen/Fuel Cutting	401 KAR 59:010
d. Arc Gouging	401 KAR 59:010
e. Grinding	401 KAR 59:010
f. Fiberglass Work	401 KAR 59:010
3. Paint Booth Paint Booth Direct Heater	N/A
4. Other Facilities	
a. Office 270,000 Btu/hr Propane Heater	N/A
b. Locker Room 180,000 Btu/hr Propane Heater	N/A
c. 275 Gallon DEC Diesel Fuel Tank	N/A
d. 275 Gallon Gasoline Fuel Tank	N/A
e. Diesel Locomotive Fuel Tank	N/A
f. Paved/Unpaved Road Dust	401 KAR 63:010
g. (6) 1000 Gallon Propane Fuel Tanks	N/A

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Particulate matter and volatile organic compound (VOC) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. VOC emissions shall not exceed 50 tons during any consecutive twelve (12) month period. Monthly records to demonstrate compliance with this limitation shall be maintained and total VOC emissions shall be reported on a semi-annual basis. VOC emissions shall be calculated and recorded on a *monthly* basis. These records shall be summarized in tons per month of VOC emissions; subsequently, tons of VOC emissions per rolling 12-month period shall be recorded. In addition, these records shall demonstrate compliance with the VOC emission limitations listed herein for the conditional major limitations. These records shall be maintained on site for a period of five years from the date the data was collected and shall be provided to the Division upon request.

Compliance Demonstration Method:

VOC emitted (lb/month) = \sum [Emissions of VOC from coatings and cleanup solvents from surface coating operations] + \sum [Emissions of VOC from cold cleaning degreaser]

VOC emitted (lb/month):

$$E_{VOC} = Q_P * CP_{VOC} + Q_R * CR_{VOC} + Q_S * S_{VOC} + Q_D * CD_{VOC} \text{ (Eq. 1)}$$

$$Q_C = Q_P + Q_R \text{ (Eq. 2)}$$

$$Q_P = Q_C * \left(\frac{\text{Gallons of paint "i"}}{\text{Gallons of paint "i" + Gallons of reducing solvent "i"}} \right) \text{ (Eq. 3)}$$

$$Q_R = Q_C * \left(\frac{\text{Gallons of reducing solvent "i"}}{\text{Gallons of paint "i" + Gallons of reducing solvent "i"}} \right) \text{ (Eq. 4)}$$

Note: Equation 1 shall be used for determining monthly and twelve-month rolling total VOC emissions. Equations 2 through 4 shall be used for completing the annual emission inventory survey as required by 401 KAR 52:030, Section 25. Q_C shall be the value in gallons entered on the KYEIS survey representing coating use for each surface coating line and shall reflect coating as applied per calendar year.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

Where

E_{VOC} = Emission rate of VOC in pounds per month.

Q_P = Gallons of paint "i" used per month.

CP_{VOC} = Content of VOC in paint "i" (lb/gal).

Q_R = Gallons of reducing solvent "i" used per month.

CR_{VOC} = Content of VOC in reducing solvent "i" (lb/gal).

Q_C = Gallons of coating (paint and reducer mixed) as applied used per month.

Q_S = Gallons of clean-up solvent used per month.

S_{VOC} = Content of VOC in clean-up solvent (lb/gal)

Q_D = Gallons of degreasing solvent used per month.

CD_{VOC} = Content of VOC in degreasing solvent (lb/gal)

The general equation for multiple-part coatings is:

$$Q = Q_T * \frac{N_i}{\sum_{i=1}^n N_i}$$

4. The emissions of any individual Hazardous Air Pollutant (HAP) shall not exceed nine (9) tons during any consecutive twelve (12) month period. The emissions of combined HAP shall not exceed twenty-two and one-half (22.5) tons during any consecutive twelve (12) month period. Monthly records, which demonstrate compliance with this limitation, shall be maintained and total HAP emissions shall be reported on a semi-annual basis. HAP emissions shall be calculated and recorded on a *monthly* basis. These records shall be summarized in tons per month HAP emissions; subsequently, tons of HAP emissions per rolling 12-month period shall be recorded. In addition, these records shall demonstrate compliance with HAP emission limitations listed herein for the conditional major limitations. These records, as well as purchase orders and invoices for all HAP containing materials, shall be maintained on site for a period of five years from the date the data was collected and shall be provided to the Division upon request.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

Compliance Demonstration Method:

HAP "a" emitted (lb/month) = \sum [Emission of HAP "a" from coatings and cleanup solvents from surface coating operations]

HAP "a" emitted (lb/month):

$$E_{HAPa} = Q_P * CP_{HAPa} + Q_R * CR_{HAPa} + Q_S * S_{HAPa} + Q_D * CD_{HAPa} \quad (\text{Eq. 1})$$

$$Q_C = Q_P + Q_R \quad (\text{Eq. 2})$$

$$Q_P = Q_C * \left(\frac{\text{Gallons of paint "i"}}{\text{Gallons of paint "i" + Gallons of reducing solvent "i"}} \right) \quad (\text{Eq. 3})$$

$$Q_R = Q_C * \left(\frac{\text{Gallons of reducing solvent "i"}}{\text{Gallons of paint "i" + Gallons of reducing solvent "i"}} \right) \quad (\text{Eq. 4})$$

Where

E_{HAPa} = Emission rate of HAP "a" in pounds per month.

Q_P = Gallons of paint "i" used per month.

CP_{HAPa} = Content of HAP "a" in paint "i" (lb/gal).

Q_R = Gallons of reducing solvent "i" used per month.

CR_{HAPa} = Content of HAP "a" in reducing solvent "i" (lb/gal).

Q_C = Gallons of coating (paint and reducer mixed) as applied used per month.

Q_S = Gallons of clean-up solvent used per month.

S_{HAPa} = Content of HAP "a" in clean-up solvent (lb/gal)

Q_D = Gallons of degreasing solvent used per month.

CD_{HAPa} = Content of HAP "a" in degreasing solvent (lb/gal)

The general equation for multiple-part coatings is:

$$Q = Q_T * \frac{N_i}{\sum_{i=1}^n N_i}$$

Where:

Q = Material usage rate (gal/hr) of component (e.g., coating, thinner)

Q_T = Total multiple-part coating material usage rate (gal/hr)

N_i = Number of parts of component "i" in multiple-part coating

n = Total number of components in multiple-part coating

Referenced from U.S. EPA Emission Inventory Improvement Program, Technical Report Series, Volume II, Chapter 7, Preferred and Alternative Methods for Estimating Air Emissions from Surface Coating Operations (July, 2001).

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place (as defined in this permit), and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:030 Section 3(1)(f)1a and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
9. Pursuant to 401 KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - a. Identification of each term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality
Florence Regional Office
8020 Veterans Memorial Drive, Suite 110
Florence, KY 41042

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.
11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
- a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
 - (1) The size and location of both the original and replacement units; and
 - (2) Any resulting change in emissions;
 - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
 - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
 - d. The replacement unit shall comply with all applicable requirements; and
 - e. The source shall notify Regional office of all shutdowns and start-ups.
 - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
 - (1) Re-install the original unit and remove or dismantle the replacement unit; or
 - (2) Submit an application to permit the replacement unit as a permanent change.

SECTION G - GENERAL PROVISIONS**1. General Compliance Requirements**

- a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
 - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-12-b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

SECTION G - GENERAL PROVISIONS (CONTINUED)

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:030, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in this permit; and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].
- b. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

3. Permit Revisions

- a. Minor permit revision procedures specified in 401 KAR 52:030 Section 14(3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

No construction authorized by this permit.

SECTION G - GENERAL PROVISIONS (CONTINUED)**5. Testing Requirements**

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - (4) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
 - (5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

SECTION G - GENERAL PROVISIONS (CONTINUED)

- b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

8. Ozone depleting substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515.

- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

N/A

SECTION I - COMPLIANCE SCHEDULE

N/A